

On *Acantholycosa solituda* (Levi & Levi) and *A. sternerii* (Marusik) (Araneae: Lycosidae), a pair of geographically distant allied species

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Abstract — The wolf spider species *Pardosa solituda* Levi & Levi (Nearctic: Rocky Mountains) and *Pardosa sternerii* Marusik (Palearctic: Mongolia, South Siberia) are redescribed and illustrated, the female of the latter described for the first time. The two species are closely allied by the conformation of the copulatory organs. The males share the condition of having a lanate pubescence on the tibiae and metatarsi of the first and second legs. The cuticle of these leg segments is equipped with an abundance of pores of a type presumably associated with excretion of some semiochemical substance. Both species are here transferred to the genus *Acantholycosa*.

Key words — Lycosidae, *Acantholycosa*, *Pardosa*, redescriptions, cuticular pores, east Palaearctic, Nearctic

Introduction

The Nearctic wolf spider species *Pardosa solituda* Levi & Levi, from high altitudes in the Rocky Mountains, was for a time known as the only representative of the *solituda* species group (Dondale & Redner 1987, 1990). Recently, a second representative, *P. sternerii* Marusik (1993), known from a single male from northern Mongolia, was added to this group. As pointed out by Marusik (1993), both species are morphologically very close. More material of *P. sternerii* has since become available, including the hitherto unknown female. Because of the similarity between these two species, both are redescribed below.

Pardosa sternerii and *P. solituda* are here formally transferred to the genus *Acantholycosa*, though *P. sternerii* is already listed in *Acantholycosa* in a recent synopsis of the spider fauna of Tuva (Marusik et al. 2000).

Material

Material is deposited in the following collections: AMNH - American Museum of Natural History, New York; CBRV - private collection of Beatrice R. Vogel, Helena, Montana; ISEA Zoological Museum, Institute of Systematics and Ecology of Animals, Novosibirsk; MCZ - Museum of Comparative Zoology, Harvard University, Cambridge (Mass.); MMUM - Manchester Museum, Manchester; NHRS - Swedish Museum of Natural History, Stockholm; ZISP - Zoological Institute of the Russian Academy of

Sciences, St. Petersburg; ZMMU - Zoological Museum of Moscow State University, Moscow; ZMUT - Zoological Museum of University of Turku, Turku.

Abbreviations used are: ALE, anterior lateral eye; AME, anterior median eye; PLE, posterior lateral eye; PME, posterior median eye; Fe, femur; Pt, patella; Ti, tibia; Mt, metatarsus; Ta, tarsus; Cy, cymbium.

Measurements are given in mm and refer to specified individuals. Eyepiece micrometer units (as given for eyes) can be converted to mm by dividing by 80.

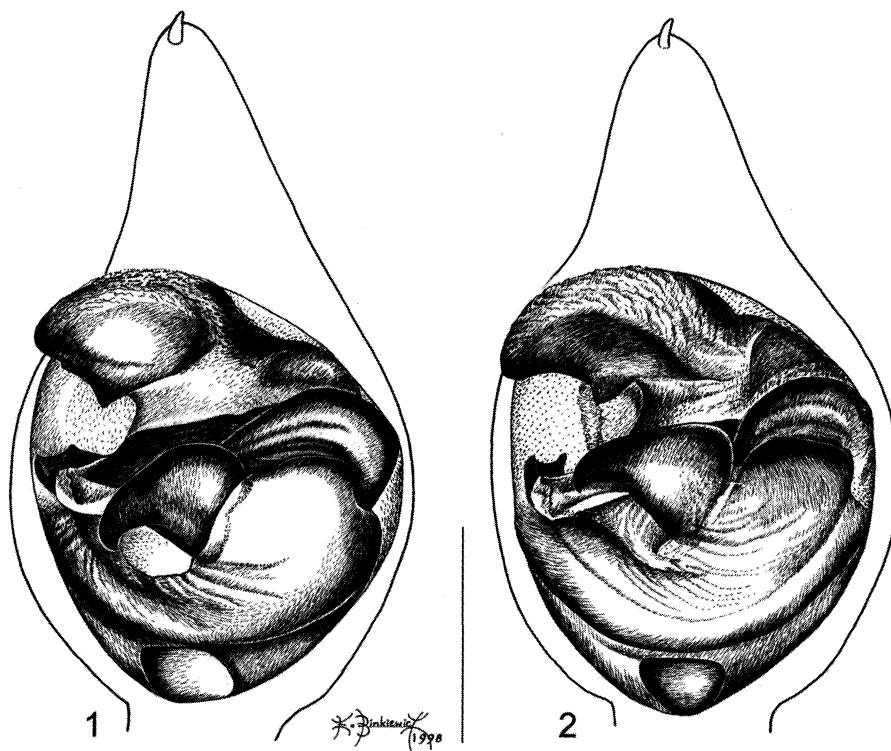
Acantholycosa solituda (Levi & Levi) **comb. n.**

(Figs. 1, 3–6, 9–11, 14, 19–20, 22–24, 28. Map 1)

Pardosa solituda Levi & Levi 1951, pp. 225–226, figs. 11, 16 (♂♀, see Remarks below); Roewer 1954, p. 194; Dondale & Redner 1987, pp. 13–14, figs. 15, 16, 35, 36 (♂♀); Dondale & Redner 1990, pp. 175–177, figs. 224–227 (♂♀); Platnick 2001. (Holotype ♂ from United States: Wyoming, Grand Teton National Park, Lake Solitude, in AMNH, examined.)

Diagnosis. Males are distinguished from the other congeners by the configuration of the palp, notably the shape of the proximal part of the embolus; females by the configuration of the epigyne, notably the long oblique depressions on each side in anterior half.

Description. MALE (Wyoming, Death Canyon): Total length 8.6. Carapace 4.40 long, 3.50 wide.



Figs. 1–2. Right male palp, ventral view. — 1, *Acantholycosa solituda* (Wyoming). — 2, *A. sternerii* (Chita Area). Scale line: 0.5 mm

Carapace: dusky brown, sometimes with trace of very slightly lighter median band. No lateral (submarginal) bands discernible. Thoracic part with dark recumbent pubescence (a few whitish hairs in median band at fovea). Clypeus lighter brown below ALEs. Chelicerae brownish with long and short dark hairs. Sternum brownish with light pubescence and scattered erect dark hairs.

Eyes: Width of row I 70, row II 102, row III 140, row II–III 98. Diameter of AME 13, ALE 12, PME 38, PLE 32. Distance between AMEs 9, between AME and ALE 7.

Abdomen: dorsally dark grey with brownish lanceolate stripe. Posteriorly with a row of white hair tufts on each side of the median area. Venter light brown with light recumbent pubescence and numerous scattered, short, thin dark hairs.

Legs (Table 1): brown with weak traces of pseudoannulation on femora (notably Fe III and IV). Ti I with 6–7, and Ti II with (5–) 6 overlapping spines placed in a row prolaterally (with a row of about the same number of spines retrolaterally). Ti+Mt I and II covered with dense pubescence of long, light, fine hairs (Fig. 14) and cuticle equipped with numerous pores (identical to the type shown in Fig. 17) only visible in large magnification.

Palp (Fig. 1): Pt 1.00, Ti 1.00, Cy 1.80. All segments dusky brown and with dark hairs. Tegular apophysis stout and short, distally rounded; laterad process stout, usually with more or less prominent subapical projection before hook-shaped tip (Figs. 6, 11). Terminal apophysis (Figs. 3, 9) long, sclerotized, curved anteriad, with conspicuous subterminal process. Palea with more or less pointed projection (Figs. 1, 3, 9). Embolus flattened, thick at base, ventral

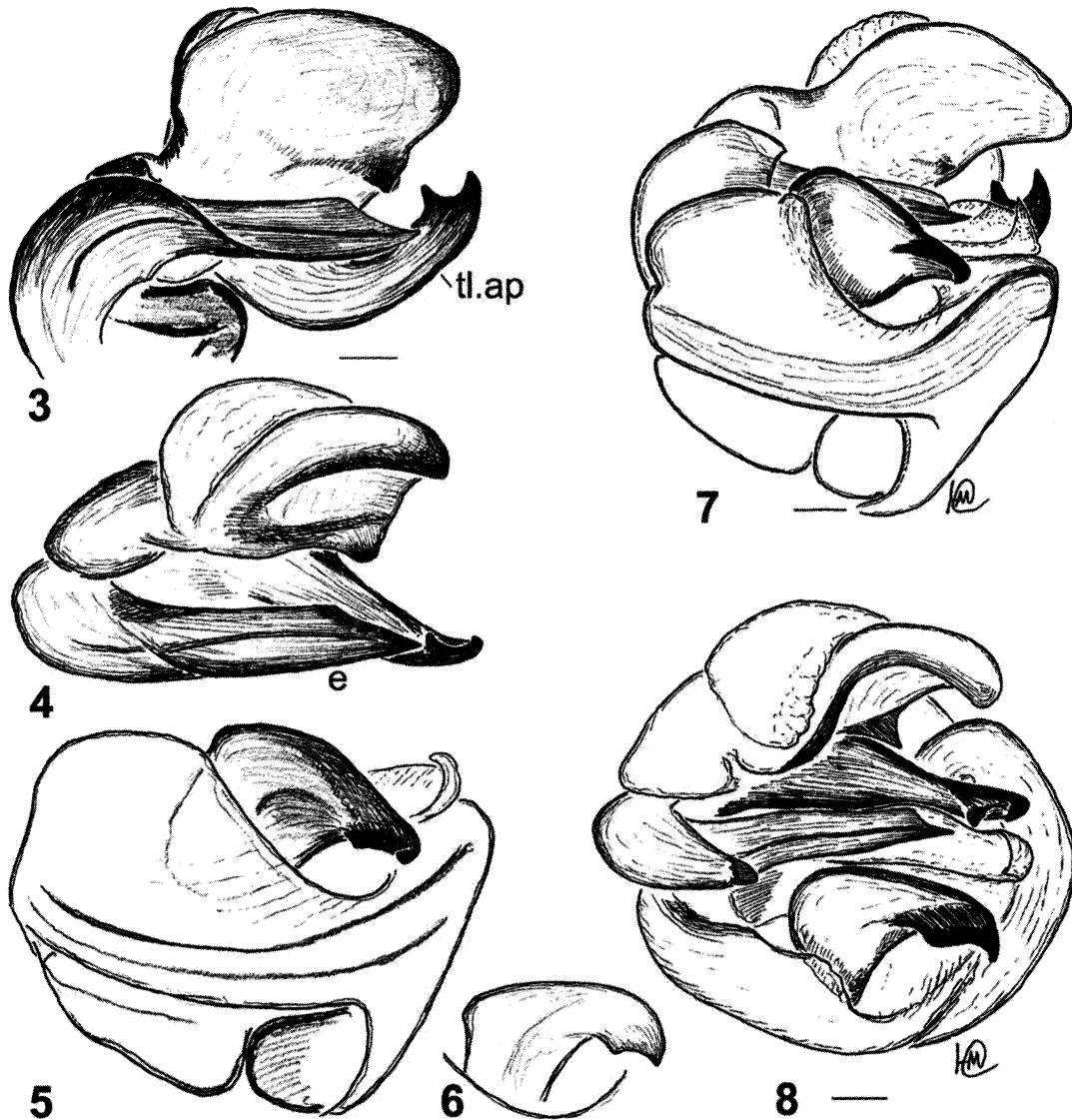
Table 1. Leg I–IV measurements (mm) of *Acantholycosa solituda* (Levi & Levi) and *A. sternerii* (Marusik)

	Fe	Pt	Ti	Mt	Ta	Total
<i>Acantholycosa solituda</i>						
Male						
I	4.00	1.85	3.80	3.85	1.70	15.20
II	4.00	1.85	3.65	4.00	1.75	15.25
III	3.95	1.75	3.35	4.90	1.80	15.75
IV	4.75	1.85	4.20	7.20	2.30	20.30
Female						
I	4.20	1.90	3.90	3.55	1.60	15.15
II	4.20	1.85	3.70	3.70	1.60	15.05
III	4.20	1.75	3.40	4.60	1.70	15.65
IV	5.05	1.90	4.40	6.90	2.20	20.45
<i>Acantholycosa sternerii</i>						
Male						
I	3.60	1.70	3.20	3.20	1.70	13.40
II	3.60	1.70	3.00	3.30	1.70	13.30
III	3.50	1.55	2.80	4.10	1.70	13.65
IV	4.30	1.70	3.70	6.15	2.20	18.05
Female						
I	3.95	1.80	3.40	3.35	1.65	14.15
II	3.90	1.80	3.20	3.40	1.60	13.90
III	3.80	1.65	3.00	4.20	1.70	14.35
IV	4.80	1.80	4.05	6.30	2.30	19.25

(outer) rim smoothly sloping in proximal part (Figs. 3, 9).

FEMALE (Wyoming, Death Canyon): Total length 9.5. Carapace 4.45 long, 3.50 wide.

Coloration: similar to male; median and lateral bands



Figs. 3–8. Details of left male palp. — 3–6, *Acantholycosa solituda* (Wyoming): 3–4, terminal part in ventral view (3) and from in front (4) (*tl. ap.*, terminal apophysis; *e*, embolus); 5, tegulum with tegular apophysis in ventral view; 6, tegular apophysis. — 7–8, *A. sterner* (Chita Area): bulbus in ventral view (7) and from in front (8). Scale lines: 0.1 mm

hardly discernible.

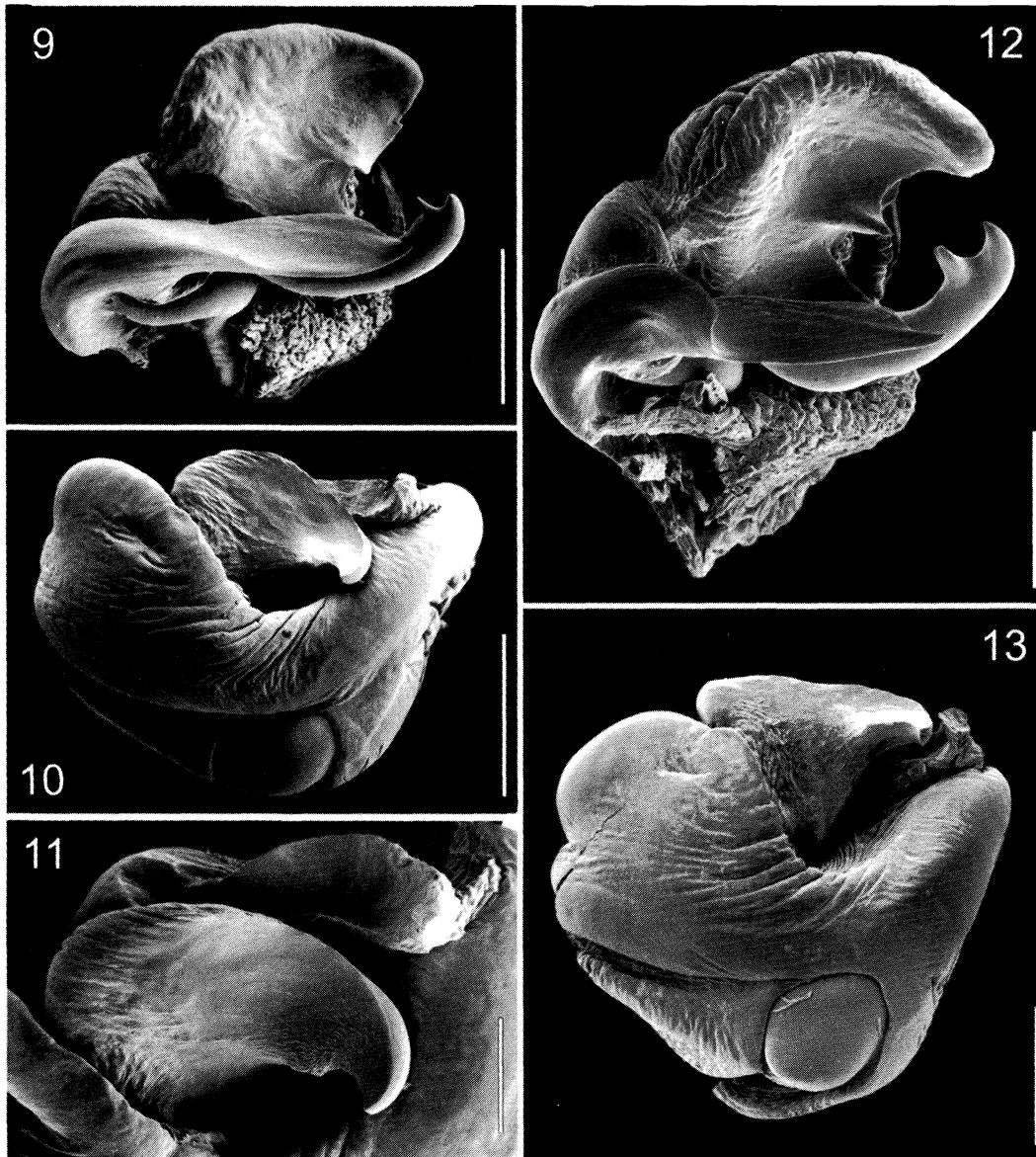
Carapace with short recumbent dark and longer recumbent light hairs in thoracic part. Spination of TiII and II as in male.

Epigyne (Figs. 19, 22–23): Anterior pockets (“hood”) separated and shallow (not discernible in the allotype, Fig. 20). Septal ridge long and narrow; extended part of septum occupying epigynal cavities (“atrium”). Each side in anterior half of epigyne with an obliquely directed ridge demarcating a lateral elongated depression (Fig. 22, arrow). Receptacles long, converging anteriad (Fig. 24).

Size variation. Carapace lengths of material measured: males 4.00–4.40 (N=10), females 4.10–4.75 (N=10); tibia I

length versus carapace length in Fig. 28 (tibia I relatively longer than in *A. sterner*).

Material examined. CANADA. **Alberta.** Banff National Park, Plain of Six Glaciers above Lake Louise, 1900 m, 10 Sept. 1991 (H. & L. Levi, MCZ), 1♀. UNITED STATES. **Colorado.** Gunnison Co., Conundrum Pass Trail, 11500–12500 ft., 28 July 1956 (H. & L. Levi, MCZ), 1♀. Park Co., Mosquito Pass, 6 miles W of Alma, 12700 ft, 22 July 1972 (B. Vogel, CBRV), 1♀. Pitkin Co., Elk Mts, Crater Lake, 9850 ft., 17 Aug. 1952 (H. Levi, MCZ), 1♀. **Montana.** Carbon Co., East Rosebud Canyon: 7300 ft, 5 July 1961 (B. Vogel, CBRV), 1♀; 6800–8600 ft, 22 Aug. 1967 (B. Vogel & C. Durden, CBRV, NHRS), 3♀. Carbon Co.: vicinity of



Figs. 9–13. Details of left male palp. — 9–11, *Acantholycosa solituda* (Wyoming): terminal part (9) and tegulum with tegular apophysis (10) in ventral view; tegular apophysis in frontal view (11). — 12–13, *A. sternereri* (Chita Area): terminal part (12) and tegulum with tegular apophysis (13) in ventral view. Scale lines: 0.1 mm (11), the rest 0.25 mm.

E. Rosebud Lake, Spread Creek Trail, 9000 ft, 18 Aug. 1969 (B. Vogel, CBRV), 1♀; vicinity of Snow Lakes, 8500–9500 ft, 2 Aug. 1966 (R. S. Lehman, CBRV), 1♂. Fergus Co., Big Snowie Mts., 8500 ft, 24 June 1961 (S. Sutton, CBRV), 1♂. Glacier National Park, Mt. Henkel, 8700 ft, 23 June 1956 (J. G. Edwards, MCZ), 1♂; Piegan Pass, 7900 ft, 23 Aug. 1953 (H. Levi, MCZ), 1♀. Powell Co., Flint Creek Mts.: 9500 ft, 28 July 1961 (B. Vogel, CBRV), 1♂; 7000–9500 ft, 29 June 1961 (S. Sutton, CBRV, NHRS), 2♂. **Utah.** Summit Co., Bald Mtn, 11050 ft., 27 July 1957 (J. H. Beaman & K. J. Stone, MCZ), 1♂. Uintah Co., Leidy Peak, 11500 ft, 6 Aug. 1964 (B. Vogel & C. Durden, CBRV), 1♂. Utah Co., Mt. Timpanogos, Hidden Lake Camp, 3200 m, 31

Aug. 1939 (AMNH), 1♀ (allotype). **Wyoming.** Carbon Co., Bridger Peak, 10500–11000 ft, 22 July 1957 (J. H. Beaman & K.J. Stone, MCZ), 1♂. Grand Teton National Park, Lake Solitude, 3000 m, 31 July 1950 (H. W. & L. R. Levi, AMNH), 1♂ (holotype). Grand Teton National Park, Death Canyon, 2500 m, 6 Aug. 1950 (H. Levi & D. C. Lowrie, AMNH), 2♂ 2♀.

Remarks. Female allotype from Utah exhibits an epigynal shape (Fig. 20) somewhat differing from that of females collected together with topotypic males from Wyoming (Fig. 19, cf. figs. in Dondale & Redner, 1987, 1990). Until more material, including males, becomes available from the Utah locality, this difference is considered to be within the

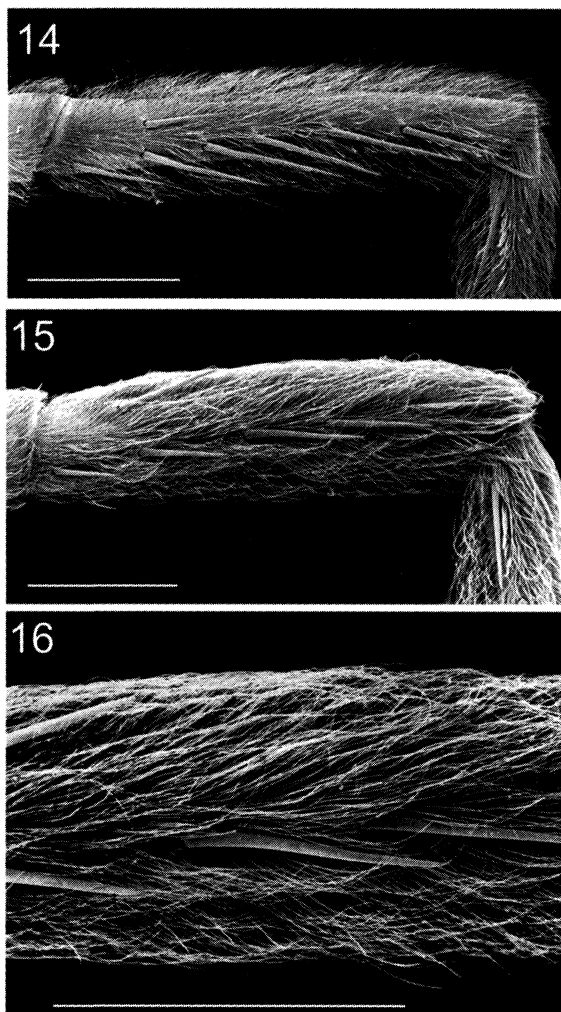
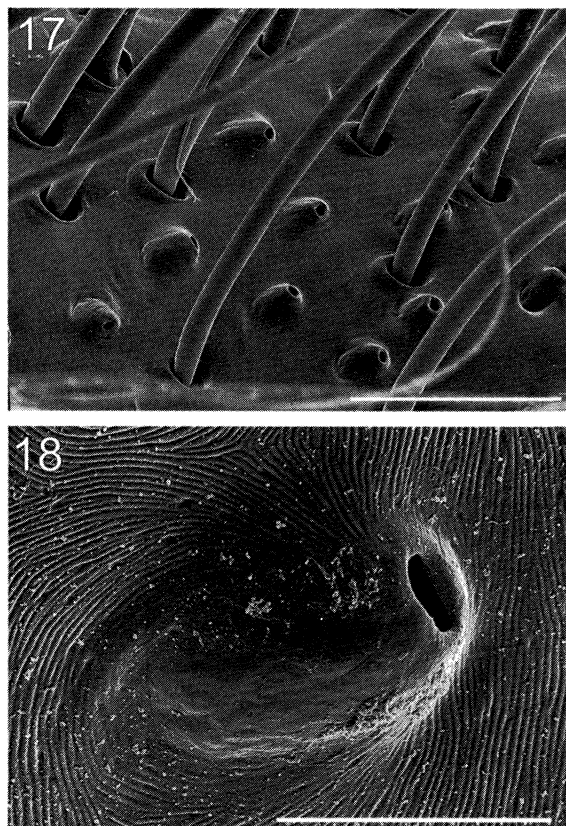


Fig. 14–16. Male adult left tibia I, prolateral view, showing lanate pubescence — 14, *Acantholycosa solituda* (Wyoming). — 15–16, *A. sternerii* (Chita Area). Scale lines: 1 mm.



Figs. 17–18. Cuticular pores in leg I of male *Acantholycosa sternerii* (17, dorsally on metatarsus; 18, prolaterally on tibia). Scale lines: 30 µm (17), 6 µm (18).

intraspecific variation.

Lowrie (1973) stated that “this species [sub *Pardosa*] is a member of the genus *Acantholycosa* or at least belongs in a group by itself”.

Habitat. According to Dondale & Redner (1990) the species occurs among stones, particularly talus, at high altitudes (up to ca. 3300 m asl) (in accordance with Lowrie 1973).

Distribution (Map 1). High altitudes in Rocky Mountains from Canada (Alberta) to United States (Utah and Colorado) (Dondale & Redner 1987, 1990).

Acantholycosa sternerii (Marusik) **comb.n.**

(Figs. 2, 7–8, 12–13, 15–18, 21, 25–27, 28. Map 1)

Pardosa sternerii Marusik 1993, pp. 77–79, figs. 1–3 (♂); Platnick 2001. (Holotype ♂ from Mongolia: Khövsgöl Aimak, Bayangol, in ZMMU, examined.)

Acantholycosa sp.: Logunov & Marusik 1995: 116.

Acantholycosa sternerii: Marusik et al. 2000: 76.

Diagnosis. Males are distinguished from the other congeners by the configuration of the palp, notably the shape of the proximal part of the embolus; females by the configuration of the epigyne.

Description. MALE (Chita Area, Sokhondo Reserve): Total length 8.6. Carapace 4.35 long, 3.50 wide.

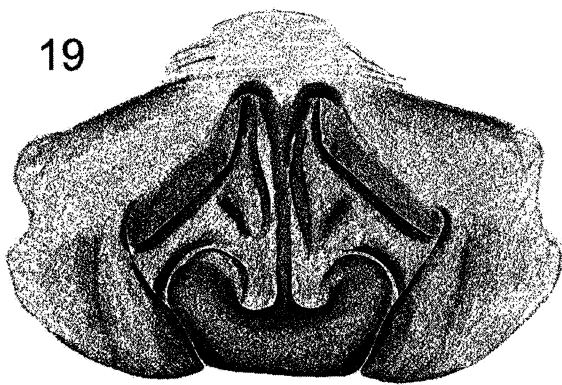
Carapace: dusky brown, median band and lateral (submarginal) bands hardly discernible, latter sometimes as small lighter spots. Thoracic part with dark recumbent hairs. Clypeus and chelicerae dark brownish with long and short dark hairs. Sternum greyish brown with erect stout dark hairs and numerous thin light hairs.

Eyes: Width of row I (very slightly procurved as seen from front) 69, row II 97, row III 133, row II–III 92. Diameter of AME 13, ALE 12, PME 36, PLE 30. Distance between AMEs 9, between AME and ALE 7.

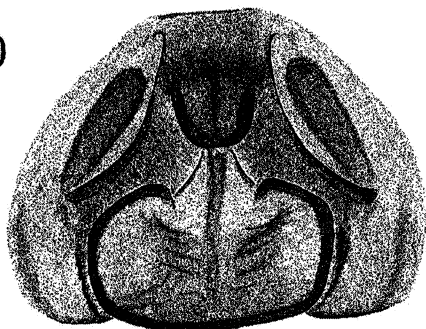
Abdomen: dorsally blackish with brownish median lanceolate stripe and posteriorly with a row of white hair tufts on each side. Venter greyish brown with pubescence of recumbent light hairs.

Legs (Table 1): brown with indistinct darker annulation (spots and rings); coxae ventrally with yellowish brown longitudinal spots. Ti+Mt I and II densely covered with lanate pubescence of long, light, curved, fine hairs (Figs. 15–16) (somewhat more prominent than in *A. solituda*). Cuticle of

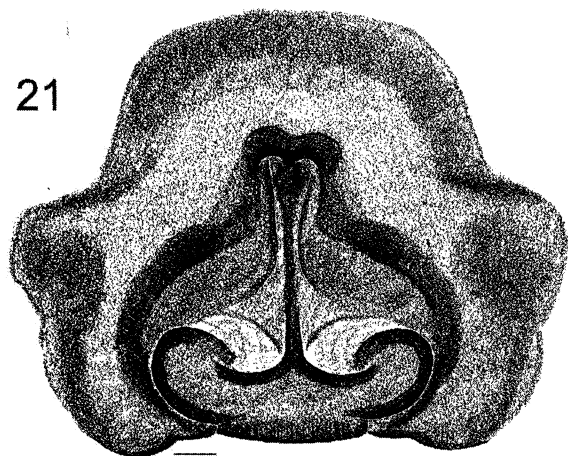
19



20



21



Figs. 19–21. Epigyne. — 19–20, *Acantholycosa solituda* (19, Wyoming; 20, Utah, allotype). — 21, *A. sternerii* (Chita Area). Scale lines: 0.1 mm.

the leg segments covered with lanate pubescence furnished with a number of pores (Figs. 17–18). Ti I with a row of 5 prolateral spines, Ti II of 4–5 prolateral spines (with about the same number of spines in a row retrolaterally, respectively).

Palp (Fig. 2): Pt 0.95, Ti 0.95, Cy 1.70. All segments dark brown and with dark hairs. Tegular apophysis (Figs. 7, 13) stout, laterad process more or less hook-shaped, sometimes with broad, rounded subterminal projection (as visible

in frontal view: Fig. 8). Terminal apophysis (Figs. 8, 12) long, sclerotized, curved anteriorly, with conspicuous subterminal process. Palea with more or less pointed projection (Figs. 2, 7–8, 12). Embolus flattened, thick at base, ventral (outer) rim abruptly sloping in proximal part (Figs. 7, 12).

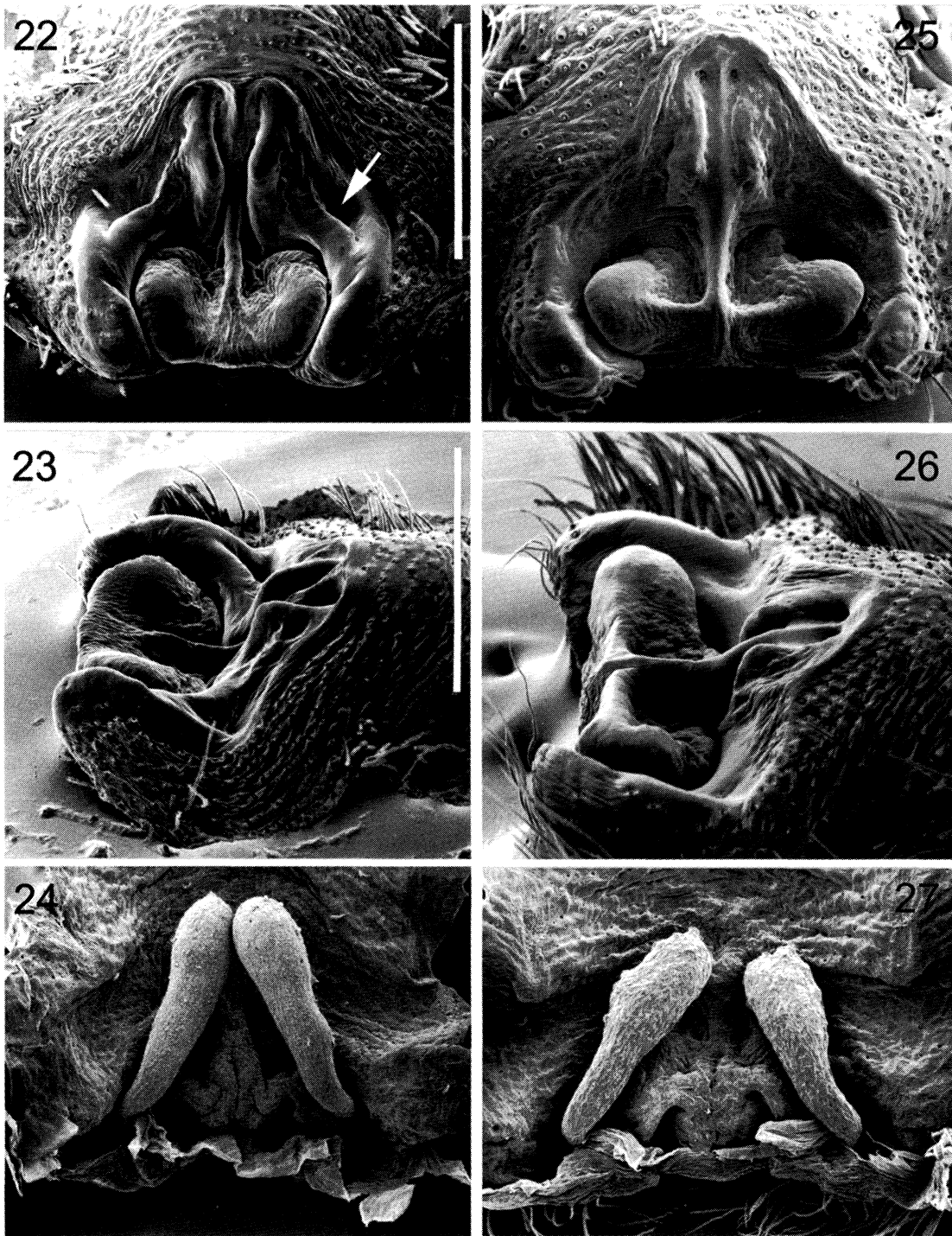
FEMALE (Chita Area, Sokhondo Reserve): Total length 9.7. Carapace 4.50 long, 3.60 wide.

Coloration similar to male; median and lateral (submarginal) bands of carapace may be slightly lighter than in male. Carapace with short recumbent dark and longer recumbent light hairs in thoracic part. Abdomen blackish with dusky brown lanceolate stripe; each side of dorsum with row of white hairs spots, first pair flanking anteriormost part of lanceolate stripe. Legs (Table 1) yellowish brown to darker brown with more contrasting dark annulation than in male. Spination of Ti I and II as in male.

Epigyne (Figs. 21, 25–26): Anterior pockets (“hood”) separated, small and close. Septal ridge of somewhat varying length, commonly as in Fig. 21; extended part of septum wide, occupying most of wide epigynal cavities (“atrium”). Septal ridge and transverse ridge of extended part forming an inverted T. Receptacles long, converging anteriorly (Fig. 27).

Size variation. Carapace lengths of material measured: males 4.10–4.70 (N=10), females 4.20–4.80 (N=10); tibia I length versus carapace length in Fig. 28 (tibia I relatively shorter than in *A. solituda*).

Material examined. MONGOLIA. Khövsgöl (Khubsugul) Aimak. Bayangol, tundra, 17–24 June 1986 (K. Ulykpan, ZMMU), 1♂ (holotype). RUSSIA. **Buryatia.** Svyatoy Nos Peninsula, Upper Burtui River, 53°39'N, 108°51'E, 1500 m, 29 June 1996 (J. Kullberg, ZMUT), 1♂. **Chita Area.** Kyra, 27–28 June 1991 (V. Dubatolov, ISEA), 1♂ 1♀. Sokhondo Reserve, Verkhniy Bukukun: border between forest and mountain tundra, 19 June 1991 (S. E. Chernyshov, ISEA), 2♂ 3♀; 1700–1750 m, mountain tundra and field of rocks, 19–22 June 1991 (S. E. Chernyshov; ISEA), 5♂; mountain tundra, 28–29 June 1991 (S. E. Chernyshov, ISEA), 3♂ 1♀; larch forest, 29 June 1991 (S. E. Chernyshov, ISEA), 2♂ 1♀; mountain tundra, 1 July 1991 (S. E. Chernyshov, ISEA), 1♂ 1♀; larch forest, 1–3 July 1991 (S. E. Chernyshov; ISEA), 4♂; 1650–1700 m, upper margin of larch forest, fields of rocks, 1 June 1991 (D. V. Logunov, ISEA), 2♂ 1♀; tundra, 24 June 1991 (V. P. Zakharov, ZISP, ZMMU, ZMUT, NHRS), 4♂ 5♀, mountain tundra, 25 June 1991 (V. P. Zakharov, ISEA), 4♂ 1♀. Sokhondo Reserve, 30 km NW of Nizhniy Bukukun, 1700–1750 m, stony mountain tundra, fields of rocks, 1 June 1991 (D. V. Logunov, ISEA), 5♂ 2♀ 1juv. **Irkutsk Area.** Irkutsk, without precise data (ISEA), 1♀. **Krasnoyarsk Province.** Yermakovskoye Distr., Oisky Pass 35–40 km SW of Oiskoye Lake, 11 July 1990 (N. A. Gladkevitch & S. E. Chernyshov, ISEA), 2♂ 1♀. **Kemerovo Area.** Gornaya Shoriya, 10 km N of Sheregesh, Pustag Mt.: screes, 1300–1500 m, 13–26 June 1999 (D. E. Lomakin, ISEA, MMUM,



Figs. 22–27. Epigyne in ventral (22, 25), lateroventral (23, 26) and dorsal view (24, 27). — 22–24, *Acantholycosa solituda* (Montana). — 25–27, *A. sterner* (Chita Area). Scale lines: 0.5 mm (24–27 same as in 22).

NHRS, ZMUT), 69♂14♀ 1 juv.; timberline, 900 m, 21–27 June 1999 (D. E. Lomakin, ISEA), 2♂. **Tuva.** Akademika Obrucheva Mt. Range, Dongul-Taiga Mt. Range: 20 km NNE of Kyzyl, 2200–2400 m, mountain tundra, pitfall traps, 7–23 June 2001 (A. Yu. & R. Yu. Dudko, I. I. Lyubechanskiy, ISEA) 1♂; 26 km NNE of Kyzyl, 2200–

2400 m, tundra, 17–18 June 2001 (R. Yu. & A. Yu. Dudko, I. I. Lyubechanskiy, ISEA, MMUM), 5♂ 6♀ 1 juv. Akademika Obrucheva Mt. Range, Khertesh-Taiga Mt. Range, 25 km NNE of Kyzyl, 2200–2400 m, mountain tundra, 19–21 June 2000 (R. Yu. & A. Yu. Dudko, I. I. Lyubechanskiy, ISEA) 7♂ 1♀ 1 juv.

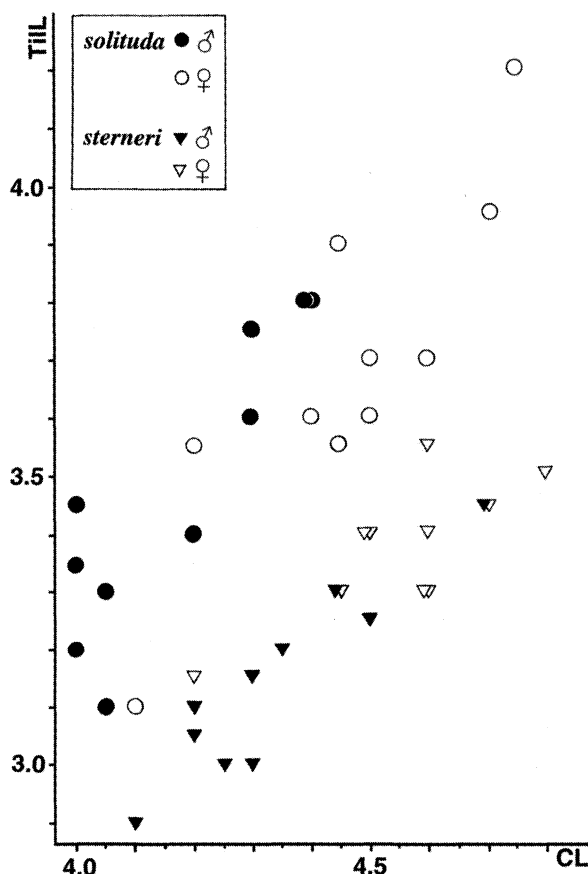


Fig. 28. Tibia I length (TiIL)/carapace length (CL) in adult males and females of *Acantholycosa solituda* and *A. sterneri*.

Habitat. Fields of rocks up to high altitudes, especially on mountain tundra.

Distribution (Map 1). Northern Mongolia, Russia (mountains of southern Siberia from West Sayan to Chita Area).

Discussion

Since Dahl (1908) erected *Acantholycosa*, a number of Palearctic species has been encompassed in this genus. A part of them have a more or less restricted occurrence in more southern montane areas, some extending to high elevations, in Asia: [*Acantholycosa azyuzini* Marusik, Hippa & Koponen, *A. baltoroi* (Caporiacco), *A. sterneri* (Marusik), *A. triangulata* Yu & Song] and in Europe [*A. pedestris* (Simon), *A. pyrenaea* (Simon), *A. rupicola* (Dufour), *A. spinosa* (Denis)], or being boreomontane, with a very wide [*A. norvegica* (Thorell)] or less wide, eastern [*A. aboriginica* Zyuzin & Marusik] distribution. All these species are petrophilous, occurring in screes, open stony debris and alike. One of the most widely spread Palearctic species, *A. lignaria* (Clerck), also thrives on dead tree trunks, timber walls and alike. *A. sibirica* (Kulczyński) and *A. subsolana* (Kulczyński) penetrate the Arctic zone in eastern Palearctic.

Wunderlich (1984) found no arguments to uphold the

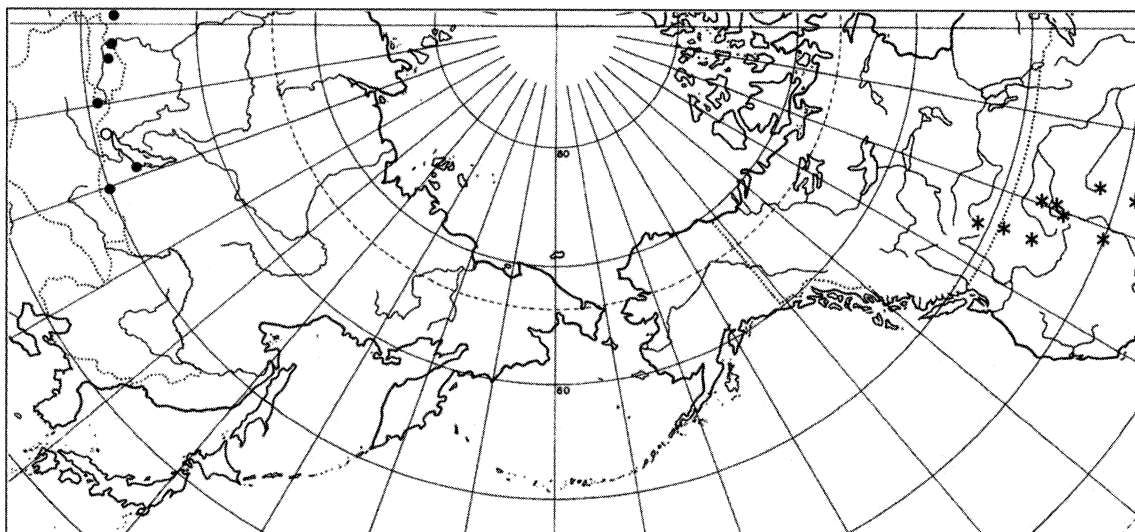
genus *Acantholycosa* and placed it as a junior synonym of *Pardosa* (and was so followed by Platnick 1989, 1993). One characteristic used for allocating species in *Acantholycosa* is the additional number of spines present on the first tibiae. Additional spines on the first tibiae are, however, also found in certain species of the *Pardosa nigra* group [*P. nigra* (L. Koch)] and the *Pardosa ferruginea* group [*P. beringiana* Dondale & Redner (Dondale & Redner 1987)] making this character state non-specific for *Acantholycosa*. Other characters used for placing species in *Acantholycosa* have likewise also been found in some species of *Pardosa* (cf. Wunderlich 1984). However, until a comparative study, encompassing all species presently included in *Acantholycosa*, is undertaken and convincing characters for the monophyly of this taxon revealed, we found it useful for reference purposes (in analogy with Buchar & Thaler 1993) to transfer *P. solituda* and *P. sterneri* to this supraspecific taxon (cf. also Mikhailov 1997). Also Platnick (1998) reinstated *Acantholycosa* because the synonymy with *Pardosa* was not generally accepted by current workers.

The morphological characters shared between *Acantholycosa solituda* and *A. sterneri* (details in male palp and epigyne, leg pilosity) indicate a common origin. Among congeners, *A. baltoroi* sensu Buchar (1976; Caporiacco's original material remains to be studied) shares certain characteristics in the copulatory organs [shape of embolus, conspicuous terminal apophysis, palea with pointed projection (= additional apophysis "x" in Buchar 1976) in male palp as well as configuration of epigyne] with *A. solituda* and *A. sterneri* (cf. Buchar 1976: figs. 1–2). We have been able to study the male from Nepal illustrated by Buchar (1976). The male has a comparatively dense pilosity of light hairs on TiI and MtI though not approaching the condition in *solituda* or *sterneri*. Moreover, the terminal apophysis in *baltoroi* lacks the subapical projection present in the two other species. *A. baltoroi* (Caporiacco) was originally described from Karakoram (Caporiacco 1935, sub *Pardosa*). Material identified as *A. baltoroi* has since been reported from Nepal (Buchar 1976, 1978), as well as China (Tibet, Sichuan, Shaanxi, Hebei, Inner Mongolia, Jilin) (Chen et al. 1998, figs 13–19; Song et al. 1999).

The cuticular pores on the legs of *A. solituda* and *A. sterneri* are of the type found in species of other lycosid genera (Kronestedt 1986; Juberthie-Jupeau et al. 1990). These pores are assumed to emit some semiochemical substance. The abundance of pores on the tibiae and metatarsi I and II in *A. solituda* and *A. sterneri* concurs with the presence of a pubescence of numerous fine hairs in these leg segments. A comparison with *A. lignaria* shows fewer pores and fine hairs in the corresponding leg segments of the latter species.

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Map 1. Collection localities of *Acantholycosa solituda* (solid circles) and *A. sternerii* (asterisks). An open circle nearby the Lake Baikal refers to specimen from Irkutsk without precise locality and date.

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アシダカグモ科：転属とシノニム (pp. 33–61)

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アシダカグモ亜科 Heteropodinae に関する分類学的検討の新規の結果をまとめた。 *Adrastis* Simon, *Panaretus* Simon, *Parhedrus* Simon はいずれも *Heteropoda* 属のシノニムであることがわかった。種レベルでのシノニム関係は次のとおり：
Adrastis atomaria Simon 1880 = *Heteropoda boiei* (Doleschall 1859); *Parhedrus fasciatus* Reimoser 1927 = *Heteropoda ocyalina* (Simon 1887); *Heteropoda holzi* Strand 1907, *Tortula gloriosa* Simon 1880, *Tortula simoni* Karsch 1884, *Holconia beccarii* Thorell 1890, *Isopoda beccarii malangana* Strand 1907 = *Heteropoda lumula* (Doleschall 1857); *Olios freycineti* Walckenaer 1837, *Olios albifrons* Lucas 1852, *Helicopis maderiana* Thorell 1875, *Palystes ledleyi* Hogg 1922, *Heteropoda venatoria pluridentata* Hogg 1914 = *Heteropoda venatoria* (Linnaeus 1767); *Spariolenus petricola* Gravely 1931 = *Spariolenus tigris* Simon 1880. 次の分類群は *Heteropoda* (*Torania*) から *Barylestis* へ移した：*B. fagei* (Lessert 1929), *B. montandoni* (Lessert 1929), *B. occidentalis* (Simon 1887), *B. scutatus* (Pocock 1903), *B. variatus* (Pocock 1899). 次の分類群は *Adrastis* から *Heteropoda* へ移した：*H. lashbrookii* (Hogg 1922), *H. murina* (Pocock 1897), *H. planiceps* (Pocock 1897), *H. spinipes* (Pocock 1897). 次の分類群は *Panaretus* から *Heteropoda* へ移した：*H. borneensis* (Thorell 1890), *H. chelata* (Strand 1911), *H. chelata vittichelis* (Strand 1911), *H. ignichelis* (Simon 1880), *H. javana* (Simon 1880), *H. nirounensis* (Simon 1903). 次の種は *Parhedrus* から *Heteropoda* へ移した：*H. ocyalina* (Simon 1887). 次の分類群は *Torania* から *Heteropoda* へ移した：*H. armillata* (Thorell 1887) と *H. striatipes* (Leardi 1901). *Heteropoda lumula* (Doleschall 1857) を *Heteropoda thoracica* (C. L. Koch 1845) のシノニムから復帰させた。新名 *Heteropoda strandi* を提唱した (*Heteropoda panaretiformis* は Strand 1906 により先取されていたため)。 *Heteropoda venatoria* の亜種とされていた次の種を独立種に昇格させた：*H. bonthainensis* Merian 1911, *H. flavocephala* Merian 1911, *H. luwuensis* Merian

1911, *H. minahassae* Merian 1911, *H. montana* Merian 1911 と *H. striata* Merian 1911. *Hoedillus* Simon 1898 とそのタイプ種 *Hoedillus sexpunctatus* Simon 1898 はミヤマシボグモ科 (*Zoridae*) へ移した。次の種は *Adrastis* から *Pandercetes* へ移した：*P. nigrogularis* (Simon 1897). 次の分類群は *Heteropoda* から *Pseudopoda* へ移した：*P. akashi* (Sethi & Tikader 1988) と *P. lutea* (Thorell 1895). 次の種は *Heteropoda* から *Spariolenus* へ移した：*S. minusculus* (Reimoser 1934). 種名安定のため、次の種のレクトタイプとパラレクトタイプを指定した：*Heteropoda borneensis* (Thorell 1890), *Olios freycineti* Walckenaer 1837, *Palystes ledleyi* Hogg 1922, *Spariolenus minusculus* (Reimoser 1934). 次の種をそれぞれの地域から初めて記録した：*Barylestis occidentalis* (Simon 1887) をスーダンから, *B. montandoni* (Lessert 1929) をウガンダから, *B. fagei* (Lessert 1929) をルアンダから, *Heteropoda javana* (Simon 1880) をスマトラから *H. boiei* (Doleschall 1859) をマレーシアから, そして *H. lumula* (Doleschall 1857) をボルネオから。得られるかぎり、生殖器と他の重要な外部形態形質を図示した。(和訳：編集委員会)

コモリグモ科の地理的に隔たった近縁種のペア：
Acantholycosa solitudo (Levi & Levi) と *A. sternerii* (Marusik) (pp. 63–71)

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コモリグモ科の *Pardosa solitudo* Levi & Levi (新北区：ロッキーマン山脈) と *Pardosa sternerii* Marusik (旧北区：モンゴル、南シベリア) を再記載した。後者の雌を初めて記載・図示した。この2種は交接器官の配置により最近縁と考えられる。両種の雄は第1脚、第2脚の脛節と蹠節上に羊毛状の柔毛を共有する。これらの歩脚の節の外皮には何らかの化学物質を分泌すると思われる孔が多数ある。両種を *Acantholycosa* に転属した。(和訳：編集委員会)

書 評 Book Reviews

The Spiders of Korea

Namkung, Joon (2001) [In Korean]

Kyo-Hak Publishing. Co., Ltd.

ISBN 89-09-07075-7 96490, 35,000 Korean Won

待ちに待った南宮峻氏の『韓国クモ図鑑』が出版された。B6版 648 頁の大著である。南宮氏は 1920 年生まれで、第二次世界大戦にも従軍した経験を持つ韓国のクモ学者。35 年間、中学校の教員をされ、洞窟性の生物や蜘蛛の分類研究に努力された。日本蜘蛛学会会員としても長く、すでに 1964 年の *Atypus*

に「韓国忠州の蜘蛛」を投稿している。日本語に堪能、温厚篤実、謙虚な人柄で、韓国のクモに関心をもつ私たち日本の研究者のほとんどが南宮氏のお世話になっている。私は 1990 年に新海栄一・小野展嗣両氏とともに韓国クモ研究所所長・金胃弼氏に招かれて訪韓したおりに、実質的な案内役として南宮氏に連日お世話になった。その当時から、南宮氏は一眼レフカメラを抱えて、クモの接写を盛んに撮影していた。新海栄一氏のフィールド図鑑『クモ』が出版された直後でもあり、南宮氏は新海氏の図鑑に負けない、写真と生殖器の図を並置した真に役立つ韓国クモ図鑑を作る夢を語っていた。すでに 70 歳という高齢で